

Pancreas Known by the Chinese in the Middle Ages!

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I

Regner de GRAAF, Holland, was the first to study the pancreas and its secretions (1664). The description of the pancreas (1316) by MONDINO, Restorer of Anatomy, is very obscure and even in the fifth book of the *Fabrica* written by VESALIUS in 1543 pancreas is regarded as several glands (glandular bodies) but not as a single organ.

In Asia, there have long been used the terms of *wu-tsang*^a (five viscera, *i.e.* the heart, the liver, the spleen, the lungs and the kidneys) *liu-fu*^b (six bowels, *i.e.* the small intestines, the gall-bladder, the stomach, the lower intestines, the bladder and the *san-chiao*^c), but neither term contains pancreas. It was usual in medieval Chinese works on anatomy that the pancreas and nervous system were ignored. This, however, does not mean that Chinese had no knowledge of the pancreas at all. We should start with a brief review of the historical background in China and Japan on the basis of which studies on pancreas as an organ has been developed.

II

In Japan, it seems that KURIYAMA Koan^d, one of the pioneers of human dissection, was the first who observed pancreas on the dissection of a woman's body on May 21, 1759, in his native town, Hagi^e. He did not regard it as a normal organ but he thought it a clot of blood and pus near intestines and stomach¹.

In the *Kaitai Shinsho*^f, the "New Work on Anatomy", published in 1774, SUGITA Genpaku^g introduced the pancreas as one of internal organs on which Chinese had given no description or explanation at all. He translated the Dutch *alveesklier* into the Japanese term *takiriiru*^h which was synthesized by a Japanese

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